FEDERATION OF AMERICAN SCIENTISTS 1949 L Street, N.W., Washington 6, D.C.

NEWSLETTER

NOT FOR RELEASE IN ANY FORM

F.A.S.

A-698 March 7, 1949

The Atom Bomb and Strategic Warfare. The publication of Blackett's book, "Fear, War, and the Bomb", has stirred up considerable controversy because of its attack on the U.S. position on atomic energy control. Entirely aside from the political aspects of the problem, however, the careful analysis of the value of atomic bombs in strategic air warfare by one of the world's foremost operations analysts is required reading for all citizens concerned with the effect of another war on our way of life. Blackett demonstrates that atomic bombs by themselves cannot win a war against a major continental power if used in the numbers hitherto contemplated; any future war will involve an all-out effort by all arms lasting many years. The technical aspects of Blackett's argument with additional supporting evidence are summarized extremely well in Morrison's review in the February issue of the <u>Bulletin of the Atomic Scientists</u>.

The value of Blackett's analysis is that it draws attention to the connection between the problem of Atomic Bombing and the Douhet Theory of Victory through Air Power. Blackett is not alone in his criticism of the exponents of strategic air warfare. Two distinguished British military analysts have recently made similar critical reviews of the concept of strategic air warfare -- Major General Fuller in "The Second World War", and Admiral Sir Gerald Dickens in "Bombing and Strategy - The Fallacy of Total War". It is significant that all three of the critics are British and that their factual material is obtained from the over one hundred volumes of the U.S. Strategic Bombing Survey. The U.S.S.B.S. was formed at the request of the late President Roosevelt to ensure that the lessons to be learned from the past war are not lost to future generations. The Douhet theory had been put to the test principally by the Bomber Command of the Royal Air Force and later by the U.S. Army Air Force with an indecisive effect on enemy war-making potential. Although these reports are available through the Government Frinting Office, the current emphasis on a 70-Group Air Force indicates that few people are aware of the information contained in them.

None of these arguments enter into humane considerations and the effect on enemy norale of the slaughter of 20 million civilians. However, Blackett points out that the German invasion of Russia produced as many casualties and as much damage as 100 atomic bombs and yet they were unable to win -- despite the fact that they had a strong army on the premises which the 70-Group Air Force is unable to provide.

International Control Developments. The U.N. Atomic Energy Commission met on Feb. 18 to consider what should be done in the light of the U.N. General Assembly request to continue discussions leading toward the development of a control scheme. Dr. Jose Arce of Argentina wanted a draft convention by fall but no similarly ambitious program was proposed by any of the other delegations. Instead the secretariat was asked to prepare a working paper to cover the recommendations of the Paris meeting of the General Assembly and a resume of the work done to date in the UNAEC. There is no evidence that the U.S. delegation is prepared to discuss all the issues which have not yet been taken up. Matters are expected to proceed very slowly for some time although some informal exploratory meetings may be held. The New York chapter of the FAS was sufficiently alert that their proposals for the agenda were included in the news story reporting the first meeting. The FAS public statement ten days later also was well received in the press. It outlined four major points for discussion: (1) organizational details, including finance and administration, (2) establishment of quotas, (3) transition stages to full control, and (4) sanctions to deal with violations. A complete development of the majority plan will help determine the amount of national sovereignty which must be relinquished in the interests of survival.

The Ralph Spitzer Case. Last week an appeal for academic freedom was sounded by the American Association of University Professors, assembled in Washington in their thirty-fifth annual convention. They spoke out against a background of increasing frequency of dismissals of college professors for allegedly maintaining unorthodox political and scientific views. Among such cases was that of Dr. Ralph Spitzer, Associate Professor Chemistry, Oregon State College, whose contract was not renewed because of a letter written by him to <u>Chemical and Engineering News</u> (1/31/49). In the letter he discussed the genetics controversy in the Soviet Union, took exception to the interpretation given by Muller in recent articles in the <u>Saturday Review of</u> <u>Literature</u>, and urged that objective consideration be given in this country to the views of Lysenko, Soviet agronomist.

Because of the possible implications for scientific, as well as academic, freedom indicated by newspaper accounts, the Washington office of the Federation telegraphed both Spitzer and Dr. A. L. Strand, President of Oregon State College, for explanatory statements. Their replies indicate: (1) The charges against Spitzer are based solely on his letter to <u>Chemical and Engineering News</u>, (2) Strand interprets the letter as support for Lysenkoism and argues that such support, in the face of adverse criticism leveled against Lysenkoism by outstanding geneticists, demonstrates that Spitzer is a follower of "the party line" in genetics and is therefore "not much of a scientist or has lost the freedom that an instructor or investigator should possess", (3) Spitzer asserts that he did not, in his letter, "support or accept Lysenko's theories" and that his dismissal is a violation of academic and scientific freedom. Spitzer suggests, and Strand denies, that his dismissal is related to his membership in the Progressive Party. A second faculty members an economist and a member of the Progressive Party, also was recently given notice that his contract would not be renewed.

Involved in the case is the general issue of whether the social and political views of an individual can be used to evaluate his competence as an instructor or investigator. Many thoughtful students of the problems involved in safeguarding academic freedom argue that the only safe test of competence is analysis of the actual performance of an individual in the classroom or in scholarly activity. By centering his argument on Spitzer's asserted support of Lysenkoism, however, Strand has raised other issues of particular importance to scientists. In his 17-page justification of the dismissal of Spitzer, Strand states, for instance, " -- to deny the validity of the work of Mendel and Morgan in the field of genetics is comparable to denying the major work of Mendeleef in the field of chemistry or the work of Pasteur and Koch in bacteriology". The fact, of course, is that portions of the work of any one of these men has been successfully denied, and their general conclusions have undergone, and will undergo, reinterpretation in the light of new facts. Biologists who have been following recent work in genetics, particularly of lower organisms, point out that ideas are emerging which certainly modify classical genetic formulations and may require extensive revision of present conceptions of heredity. Whatever may be the status of Soviet biological thought, they say, it will be dangerous if reaction against it takes the form of dogmatic defense of "classical genetics" and discrimination against unorthodoxy. This, after all, is the major complaint against Lysenkoism.

<u>Condon Case Flare-up</u>. The article in the February <u>Scientific American</u>, "Trial by Newspaper", examining the behavior of the press in the Condon case, touched off a 3-day flurry on Capitol Hill. Rep. Holifield referred to the article in a speech; Rep. Rankin demanded that Condon be given a public hearing by the Un-American Activities Committee; Chairman Wood said he would be given one if he still wants one; Condon said the burden was on the committee to call him. Rep. Nexon is reported to want to push the issue, Rep. Wood is willing to let it drop. There the matter stands. With the drastic change in membership of the committee in this Congress, it seems unlikely that the case will be pursued, if at all, in the vein of a year ago.

Radio-isotopes. The FAS renewed its plea for the distribution of radio-isotopes internationally under the auspices of the United Nations in a letter to Trygve Lie, made public February 21st.

A-698

National Science Legislation. As expected, the Senate Labor and Public Welfare Committee reported out (on March 3rd) S. 247 without amendment. The bill now goes to the Senate floor, to be considered in due course. There has been no action whatever as yet in the House. The FAS is continuing its efforts to inform members of Congress regarding the bill and the Federation's views. Four specific amendments have been proposed relating to (a) rowers of the director, (b) survey and policy-forming functions of the Foundation, (c) strengthening underdeveloped areas in the distribution of funds, (d) security provisions. The specific wording of these amendments and justification for them has been given in FAS memo A-691, which has been distributed to executive committees of FAS chapters and prominent scientists, educators, and legislators. Copies are available on request to the FAS office. Letters to congressmen from their constituencies are needed to supplement the direct contacts carried on in Washington. Tell them of the importance of getting a bill passed at this session and ask them to support such strengthening amendments if offered on the floor.

How Many Atomic Bombs Do We Have? Reactions have been varied to McMahon's suggestion, reported in the last newsletter, that the Atomic Energy Commission consider the question of the advisability of releasing the size of the U.S. stockpile of atomic bombs. The Russians promptly presented a resolution in the U.N. Security Council dealing with arms reduction and included a request that the U.S. make public complete atomic bomb data by March 31st of this year. The resolution was rejected, being only supported by the USSR and the Ukraine, the other nine members abstaining. President Truman followed this with a statement that the stockpile is not a matter for public discussion, and pointed out that under the present law the President, and not Congress, determined policy in this area. McMahon, of course, was calling attention to the fact that Congress knows nothing about the atomic stockpile.

So far there have only been abrupt statement like those cited -- we should or we should not. What would be the effect on the Congress and on the American people if they were told our atomic potential? Would it strengthen or weaken our diplomatic position? Consider the forms that such information might take: the U.S. has "x" bombs now ready; the present production potential is "y" bombs per year; we have enough bombs to utterly destroy "z" cities the size of Topeka; we have enough bombs to defend against any known concentration of conventional military strength of foreign powers; etc. Balance the feeling of uncertainty or insecurity among the peoples of the world against the advantages of secrecy in international maneuvers.

POLL. The FAS Administrative Committee has requested a poll on this question to measure the opinion of the membership. Please send to FAS, 1749 L Street, N.W., Washington 6, D.C.

1. Do you think there should be public discussion on the advisability of releasing information on the atomic bomb stockpile? Yes ____ No ____ Undecided_____

2. Do you think the U.S. should:

a) say nothing about the subject?
b) treat the subject in general terms (e.g. probable standing relative to other countries)?
c) describe its potential in terms of previous explosions (Hiroshima, Bikini)?
d) announce the number of bombs on hand?
e) announce the production rate of atomic weapons?

3. What, in your opinion, would be the effect of the release of such information on the security of the U.S. and on our diplomatic position in the "Cold War"?

а-698

The Dangers of Radioactivity. A committee of prominent scientists and industrialists headed by Harold Urey, recently visited Secretary Forrestal's office to urge the release of the Evaluation Board's Report on the Bikini atomic bombs tests. They were referred to the Chairman of the Research and Development Board, Dr. K. T. Compton, who by coincidence was also the chairman of the Evaluation Board which prepared the Report. The group urged that pertinent parts of the Report be released to prevent misrepresentation of facts. Apparently it was withheld for reasons of military politics and because sensational press treatments would make it another horror story.

<u>The Scientists' Committee on Loyalty Problems</u> (an FAS Committee) has now been in existence five months. One of its first jobs was to gather information on the clearance procedures of thirty Federal agencies and Departments employing scientists. These have been summarized and distributed to all FAS chapters together with data on a number of individual cases. Copies of it and a recent supplement may be obtained from the Committee, 14 Battle Road, Princeton, New Jersey. The Committee has collected for its files the pertinent public laws, congressional committee reports, lists of experienced advisors, etc. Details of clearance procedures of the Atomic Energy Commission, drawn up in question and answer form in consultation with AEC representatives, have been distributed to interested persons.

More than thirty cases involving clearance problems have been brought directly to the Committee's attention. In each instance it furnished information on procedures and, when necessary, obtained legal assistance.

The Committee would like very much to carry out two other jobs outlined in its prospectus; to urge improvement of present clearance procedures and to engage in a program of public education. To support this work the Committee began in December a fund campaign among scientists which has not been wholly successful. In fact, so far, the fund appeal has not paid expenses. The Committee feels strongly that scientists should support its program, and hopes for greater response from its current requests.

The extent and character of loyalty and clearance problems are as yet very little known among the general public. The Committee urges that FAS members read and disseminate the information contained in such studies as that by members of the Yale Law School in the current issue of the Yale Law Journal. The Committee itself hopes to be able to make available similar information fairly soon.

FAS Meetings. A general meeting of the FAS is planned during the Washington meetings of the American Physical Society, on the subject, Science and Social Ideology. The meeting will be Friday, April 29th, at 8:00 o'clock in the Cosmos Club Auditorium.

Federation of American Scientists 1749 L Street, N.W. Washington 6, D.C. Sec. 562 P.L. & R.

А-698